

2. (Amended) The endosomal lysing [agent] polymer of claim 1 [, comprising] is a biocompatible [compound] polymer.

3. (Amended) The endosomal lysing [agent] polymer of claim 1 [, comprising] is a biodegradable [compound] polymer.

4. (Amended) The endosomal lysing [agent] polymer of claim 1 [, comprising] is a biocompatible and biodegradable [compound] polymer.

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5. (Twice Amended) An endosomal lysing [agent] polymer comprising [a compound] an endosomolytic agent [having] and one or more hydrolyzable functional moieties selected from the group consisting of ortho-esters, hydrazones, and cis-actonyl and one or more ionizable functional moieties [selected from the group consisting of ortho-esters, hydrazones, and cis-actonyl], [and] wherein said [compound] polymer is capable of effecting the lysis of an endosome in response to a change in pH.

6. (Amended) The endosomal lysing [agent] polymer of claim 5 [, comprising] is a biocompatible [compound] polymer.

7. (Amended) The endosomal lysing [agent] polymer of claim 5 [, comprising] is a biodegradable [compound] polymer.

8. (Amended) The endosomal lysing [agent] polymer of claim 5 [, comprising] is a biocompatible and biodegradable [compound] polymer.

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10. (Amended) The endosomal lysing [agent] polymer of claim [9] 1 or 5, wherein the hydrolysis of said one or more hydrolyzable functional moieties effects a hydrophobic/hydrophilic transition of said [compound] polymer.

11. (Amended) The endosomal lysing [agent] polymer of claim 10, wherein said hydrolysis further effects the release of [a compound] an endosomolytic agent capable of disrupting lipid bilayers.

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12. (Amended) The endosomal lysing [agent] polymer of claim 5, wherein said one or more ionizable functional moieties comprises proton acceptor sites.

14. (Twice Amended) The endosomal lysing [agent] polymer of claim 1 or 5, wherein each of said ortho-ester containing monomers is selected from the group consisting of N-[2-methyl-1,3-O-ethoxyethylidene-propanediol]methacrylamide, ortho-ester derivatives of tartaric acid, ortho-ester derivatives of treitol, and ortho-ester derivatives of dithiothreitol.

15. (Amended) The [polymeric lysing agent] endosomal lysing polymer of claim [9] 1 or 5, wherein the [polymeric lysing agent] polymer is combined in a form selected from the group consisting of:

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mixed polymers;
linear co-polymers;
branched co-polymers; and
dendrimer branched co-polymers.

16. The [lysing agent] endosomal lysing polymer of claim [9] 1 or 5, wherein said [agent] polymer is further functionalized with a targeting agent selected from the group consisting of low density lipoproteins, transferrin, asialoglycoproteins, gp120 envelope protein of human immunodeficiency virus, antibodies and carbohydrates.

17. (Twice Amended) A biocompatible composition comprising:
a packaging agent, characterized by an ability to bind to a therapeutic agent and mediate import into endosomes; and

[a lysing agent] an endosomal lysing polymer comprising [a compound] an endosomolytic agent and [having] one or more hydrolyzable functional moieties selected from

the group consisting of ortho-esters, hydrazones, and cis-actonyl, [and] wherein said [compound] polymer is capable of effecting the lysis of an endosome in response to a change in pH.

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18. (Amended) The biocompatible composition of claim 17, wherein said [compound] polymer further comprises one or more ionizable functional moieties.

20. (Amended) The biocompatible composition of claim 17 or 18, wherein said packaging agent and said [lysing agent] endosomal lysing polymer are combined in a form selected from the group consisting of:

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mixed polymers;
linear co-polymers;
branched co-polymers; and
dendrimer branched co-polymers.

29. (Amended) The composition of claim 17 or claim 18, wherein the hydrolysis of said one or more hydrolyzable functional moieties effects a hydrophobic/hydrophilic transition of said [compound] polymer.

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30. (Amended) The composition of claim 17 or claim 18, wherein said hydrolysis further effects the release of [a compound] an endosomolytic agent capable of disrupting lipid bilayers.

32. (Twice Amended) A cell delivery composition comprising:
a compound to be delivered to a cell;
a delivery agent bound to the compound; and
[an endosomolytic agent] the endosomal lysing polymer of claim 1 or 5.

39. (Twice Amended) A method of lysing an endosome, the method comprising the steps of:

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providing a composition for endosomal uptake into the cell; and
contacting the composition with the cell in the presence of an endosomal lysing [agent]

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polymer comprising an endosomolytic agent [having] and one or more hydrozable functional moieties selected from the group consisting of ortho-esters, hydrazones, and cis-actonyls, [and] wherein said [agent] polymer is capable of effecting the lysis of an endosome in response to a change in pH.

41. (Amended) The method of claim 39, wherein said endosomal lysing [agent] polymer comprises [a compound having] one or more hydrolyzable functionalities and one or more ionizable functionalities.

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42. (Twice Amended) A method for introducing a nucleic acid into a cell or a subcellular component, the method comprising the steps of:
providing a biocompatible delivery composition comprising:
a packaging agent;
an endosomal lysing [agent] polymer comprising an endosomolytic agent and
[having] one or more hydrozable functional moieties selected from the group consisting of ortho-esters, hydrazones, and cis-actonyls, [and] wherein said [agent] polymer is capable of effecting the lysis of an endosome in response to a change in pH; and
a nucleic acid; and
contacting the composition with cells.

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44. (Amended) The method of claim 42, wherein said [endosomolytic agent] endosomal lysing polymer comprises [a compound having] one or more hydrolyzable functionalities and one or more ionizable functionalities.

Please add the following new claim 46:

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--46. (New) The endosomal lysing agent of claim 1 or 5, wherein the endosomolytic agent is ethanol.--
